



THE ROYAL COMMISSION ON VIOLENCE IN
THE COMMUNICATIONS INDUSTRY

RESEARCH REPORT

TELEVISION VIOLENCE EFFECTS:

ISSUES AND EVIDENCE

by

Richard E. Goranson



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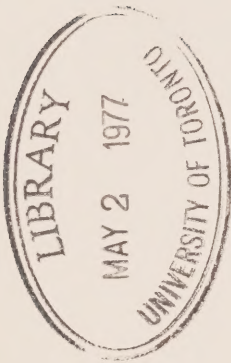
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TELEVISION VIOLENCE EFFECTS:

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A Report to the
PROVINCE OF ONTARIO
ROYAL COMMISSION ON VIOLENCE
IN THE
COMMUNICATIONS INDUSTRY

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ISSUE 1: How much violence is shown on television, and who actually watches it?

How Much Television is Watched?

Recent research of Canada's viewing habits make clear that we watch a great volume of television. In addition, studies done in the United States in the last several years probably give a good estimate of Canadians' viewing habits as well--especially for those areas where American programming is received directly or via cable (1). The results of various investigations of television consumption can be put in a number of ways, for example:

- * Both children and adults see, on the average, over 3 hours of television daily (2).
- * Almost every family has at least one television set (3).
- * The television is turned on for about 6 hours per day in the average household (1).
- * About 40% of all leisure time is spent with television. Television ranks third (behind sleep and work) as a consumer of time (4).
- * Children begin watching television on a regular basis 3 or 4 years before entering grade 1 and most children watch television every day (5).

Of course there is variability in television watching. Some children see as much as 5 or 6 hours of television each school day, while others are not allowed to watch at all on school days (6). There tends to be heavier viewing in children from poorer families (7) and children with lower IQ and academic achievement (8). Children tend to watch more television as they grow older, until adolescence when there is a temporary drop (9). Young children do most of their watching in the morning or afternoon, but older children are more likely to be watching in the evening, even as late as 11:00 p.m. (10).

How Much Violence is Shown?

The volume of violence shown on entertainment television is very great, although the exact figures vary somewhat depending on the working definition of violence (11). George Gerbner, Dean of the Annenberg School of Communication, has systematically analyzed the level of violence in American television programs since 1967 (12). The Royal Commission has commissioned a study to develop its Canadian measures of media violence and related conflicts and relationships. The definition of violence used in his analysis is "the overt expression of physical force against self or other, compelling action against one's own will or pain of being hurt or killed, or actually hurting or killing." The term "program" in this research refers to "single fictional stories presented in dramatic form" and this includes television dramas, feature films, and cartoon programs. Some of his findings are instructive, for example:

- * There is no significant drop in the overall level of violence shown on entertainment television since 1967. And the level of violence shown in the 1960s was up sharply from the level in the 1950s (13).
- * Eight out of 10 programs (and 9 out of every 10 weekend children's hour programs) contain violence.
- * Between 6 and 7 out of every 10 leading characters are involved in violence. For children's programming, the figure is between 8 and 9 out of every 10 characters.
- * Recent declines in violence shown in the "family hour" have been more than offset by increases in violence shown in the late evening and "children's hours" (weekend daytime).

In summary it can be said that North American television viewers, including children, are exposed to an enormous amount of television violence. In 1968 the National Association for Better Radio and Television estimated that between the ages 5 and 15, the average child would see the violent destruction of more than 13,400 characters on television (14), since then, no one has seriously disputed the accuracy of this estimate.

REFERENCES

1. Crawford, P., Matthews, C., & Campbell, P. The impact of violence on television on children. North York Board of Education Research Report. Toronto: January 1976.
- Crawford, P., & Rapoport, M. Results of a survey of pupils and teachers regarding television. North York Board of Education Research Report. Toronto: April 1976.
2. BBM Radio and Television Data 1975. Toronto: BBM Bureau of Measurement 1975.
- Canada. Parliament. Senate. Special Committee on Mass Media. Report. Vol. 3. Good, bad, or simply inevitable? (Ottawa, Queen's Printer, 1970). (Also known as the Davey Committee Report).
3. Broadcasting Yearbook 1971. Washington, D.C.: Broadcasting Publications Inc., 1971.
- Household Facilities and Equipment Study. (Ottawa, Statistics Canada, 1975).
- BBM Radio and Television Data 1975. Toronto: BBM Bureau of Measurement 1975.
4. Comstock, G. Television and its viewers: What social science sees. Santa Monica, California: The Rand Corporation, 1972. P-4831.
5. Lyle, J., and Hoffman, H.R. Exploration in patterns of television viewing by preschool-age children. In E.A. Rubinstein, G.A. Comstock, and J.P. Murray (Eds.), Television and social behavior. Vol. 4. Television in day-to-day life: Patterns of use. Washington, D.C.: Government Printing Office, 1972. Pp. 257-273.
6. Lyle, J., and Hoffman, H.R. Explorations in patterns of television viewing by preschool-age children. In E.A. Rubinstein, G.A. Comstock, and J.P. Murray, (Eds.), Television and social behavior. Vol. 4. Television in day-to-day life: Patterns of use. Washington, D.C.: Government Printing Office, 1972. Pp. 257-273.
- Murray, J.P. Television in inner-city homes: Viewing behavior of young boys. In E.A. Rubinstein, G.A. Comstock, and J.P. Murray (Eds.), Television and social behavior. Vol. 4. Television in day-to-day life: Patterns of use. Washington, D.C.: Government Printing Office, 1972. Pp. 345-394.
7. Greenberg, B.S., and Dervin, B. Use of the mass media by the urban poor. New York: Praeger, 1970.
8. Lyle, J., and Hoffman, H.R. Children's use of television and other media. In E.A. Rubinstein, G.A. Comstock, and J.P. Murray (Eds.), Television and social behavior. Vol. 4. Television in day-to-day life: Patterns of use. Washington, D.C.: Government Printing Office, 1972. Pp. 129-256.

9. Lyle, J. Television in daily life: Patterns of use overview.
In E.A. Rubinstein, G.A. Comstock, and J.P. Murray (Eds.),
Television and social behavior. Vol. 4. Television in day-to-
day life: Patterns of use. Washington, D.C.: Government
Printing Office, 1972. Pp. 1-32.
10. Liebert, R.M., and Poulos, R.W. Television as a moral teacher.
In T. Lickona (Ed.), Man and morality: Theory, research and
social issues. New York: Holt, Rinehart and Winston, 1974.
11. Coffin, T.E., and Tuchman, S. Rating television programs for
violence: A comparison of five surveys. Journal of Broadcasting.
1972, 17, 3-20.

Coffin, T.E., and Tuchman, S. A question of validity: Some
comments on "Apples, oranges, and the kitchen sink."
Journal of Broadcasting, 1972, 17, 31-33.

Eleey, M.F., Gerbner, G., and Tedesco, N. Apples, oranges, and
the kitchen sink: An analysis and guide to the comparison of
"violence ratings." Journal of Broadcasting, 1972, 17, 21-31.

Eleey, M.F., Gerbner, G., and Tedesco, N. Validity indeed!
Journal of Broadcasting, 1972, 17, 34-35.
12. Gerbner, G., and Gross, L. "Living with television: the violence profile."
Journal of Communications, 1976, 26, 171-194.
13. Greenberg, B.S. The content and context of violence in the mass
media. In R.K. Baker and S.K. Ball (Eds.), Violence and the
media. A staff report to the National Commission on the Causes
and Prevention of Violence. Washington, D.C.: Government Printing
Office, 1969.
14. National Association for Better Radio and Television. Cited in
L. Sabin, "Why I threw out my TV set" Today's Health,
February, 1972. (Published by the American Medical Association.)

ISSUE 2: Do children learn new forms of aggression merely by watching the kind of violence shown on television?

Children learn by watching. When children watch violence on TV, then they learn violence. The teaching potential of the medium has led some critics to speak of television as a "school for violence" (1) and as a "preparatory school for delinquency" (2). A number of well publicized incidents seem to support these views. For example, there was the case of a seven-year-old in Los Angeles who was caught sprinkling ground glass into the family meal. He had seen it shown on television and was trying it out for himself (3). There are many additional documented examples of direct imitation of television violence by children (4). But perhaps these are unusual cases. Perhaps these are disturbed children living in extreme circumstances. Research psychologists have recently been concerned with the possibility that normal children under more ordinary conditions may also learn new techniques of aggression by seeing examples in the media.

A dramatic series of experiments by Albert Bandura and his co-workers (5) has demonstrated how quickly and completely children can learn new forms of aggression. Nursery school children, both boys and girls, watched an adult perform a series of novel aggressive actions. The adult punched a large inflated doll in the face, kicked the doll, and struck it in the face with a hammer. In addition, the actor made a variety of aggressive verbal comments such as "pow ... kick him ... socko." Following this, the children were subjected to a mild frustration -- they were first given some attractive toys to play with, and then the toys were arbitrarily taken away. Each child was then allowed to play for twenty minutes in a

room containing, among other things, the inflated doll that the actor had previously attacked. During this period, observers kept a record of the child's imitative aggression (including kicking or punching the figure, or striking it in the face with a hammer). These children, particularly the boys, showed a strong tendency to imitate the aggressive acts that they had just seen. Another group of children (exposed to similar frustration) and who did not watch any aggression were also allowed to play in the same room, but they exhibited very little aggression.

These results have been obtained in a large number of similar experiments. In part, these experiments show what parents have known for a long time -- children can learn new behaviours simply by observation. But the experiment also shows that this applies to complicated aggressive acts shown briefly for only one time. It is reasonable to conclude that novel techniques of aggression such as "kung-fu" kicks, karate chops, or knife throwing may also be learned by ordinary young children merely by observing these actions demonstrated on television.

Children may learn new techniques of aggression from TV, but can they remember these for any appreciable length of time? The results of several controlled studies show that they can (6). Children in these experiments were shown films of actors performing a number of aggressive actions, and then the children were observed in a free play situation. Again, as in Bandura's experiment, the children imitated a large proportion of the aggression that they had seen. These children were tested again after a delay of 6 to 8 months without any further exposure to the film. After this length of time the children still produced over 40% of the aggressive acts that they had seen. Some subsequent research (7) with British children has shown that under a variety of circumstances an even higher proportion is retained.

The evidence on this point is clear; children can and do learn the mechanics of novel forms of aggression simply by observation. Moreover, these techniques are remembered for a long time. But will children actually perform the novel kinds of aggression that are learned from television? The actual carrying out of aggressive acts learned through observation appears to depend on a number of circumstances. Aggressive imitation has been found to be more probable in boys rather than girls (8), and in two studies (9), working class boys showed higher aggressive imitation than did middle class boys. A number of researchers (10) have found that it is those children who are particularly aggressive in everyday life that are the most likely to be influenced by aggression shown on television. The realism of the observed aggression also appears to be a factor. The more realistic the portrayal, the more likely it will be imitated (11). Cartoon characters, for example, although they may show extreme aggression, are less likely to be imitated than lifelike characters (12). In general, imitative aggression is more likely when the viewers are in a situation that is similar to the scene of the observed aggression (13).

The social context in which television is watched can influence the imitation of aggression. Children's everyday exposure to violence in the media frequently occurs when the child is with others—often older children or adults. The attitudes expressed by these other people has been found to be an important factor determining the child's later imitation of observed aggression. For example, researchers (14) have had individual children watch a televised, aggressive model while in the presence of an adult who appeared to be involved in the program. The adult spontaneously made a variety of enthusiastic comments ("Boy look at him go" ... "He sure is a tough guy") for some children, and sharply negative comments ("He shouldn't do that" ... "That's awful") for other children. The effect of these evaluative comments

appeared when the subjects were later put into the test situation along with an adult. Here, the children who had heard the positive comments showed a high level of imitative aggression, while those who heard the negative comments showed much less aggression.

Not surprisingly, a major factor influencing the child's imitation of an actor's aggression is the consequences that this aggression is seen to have. An early experiment (15) approached this question directly by showing a televised model either being lavishly rewarded or harshly punished for his aggression. Subjects in two control groups saw either a nonaggressive model or no model at all. Later the subjects who had seen the aggression being rewarded showed a good deal more imitative aggression than did the children in the other groups. Another study (16) also showed aggressive actors who were again either rewarded or punished for their behavior. In comparison with a control group that saw the actor neither rewarded nor punished, the children who saw the punishment were later much less aggressive. The control group was almost as aggressive as the model rewarded group however. This suggests that children may be almost as likely to imitate an aggressive character who "gets away with it" as they are an actor who is explicitly rewarded for his aggression.

Putting these studies into some kind of perspective, the imitation of observed aggression may be seen as part of the child's strategy in reaching his goals--the obtaining of rewards, and the avoiding of punishments. It is the observed sequence of events that teaches him a "lesson" about the use of aggression as an effective means of achieving his goals.

What then, is the relation between the use of violent methods and successful goal achievement as typically portrayed in the same media? A detailed thematic analysis of the content of popular television programs

conducted by Larsen (17) showed two things. First, violent methods are the single most popular means employed by television characters to reach their goals. And second, that socially disapproved methods are more frequently portrayed as being successful than are approved methods. Moreover, these relations were found to be particularly strong for programming directed specifically toward children. Putting these two lines of research together, it is possible to conclude that young viewers are routinely being given the message that aggression works. They are being taught that aggression is a highly effective means of achieving one's goals even though it may be socially disapproved. And thus the perceived effectiveness of aggressive actions may further encourage young viewers to actually use some of the techniques of aggression that they have seen on television.

Of course; television is only one of many factors that influence children's behaviour. It is obvious that not every child becomes aggressive every time a violent program is seen. But this is not really the point. The problem that concerns both parents and psychologists is the likelihood that demonstrations of violence on television serve to increase the overall level of aggressive attitudes and behaviours in children's lives.

REFERENCES

1. Banay, R. Testimony before the Subcommittee to Investigate Juvenile Delinquency, of the Committee on the Judiciary, United States Senate, Eighty-fourth Congress. Senate Research, April 1955, 62. Washington, D.C.: Government Printing Office, 1955.
2. Wertham, F. Seduction of the Innocent. New York: Rinehart, 1954.
3. Berkowitz, L. Aggression: A social psychological analysis. New York: McGraw-Hill, 1962.
4. Schramm, W., Lyle, J., and Parker, E.B. Children's learning from television. Studies in Public Communication, 1961, 3, 96-98.
5. Bandura, A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.

Bandura, A. Aggression: A social learning analysis. Englewood Cliffs, N.Y.: Prentice-Hall, 1973.

Bandura, A., Ross, D., and Ross, S.A. Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 1961, 63, 575-582.
6. Hicks, D.J. Imitation and retention of film-mediated aggressive peer and adult models. Journal of Personality and Social Psychology, 1965, 2, 97-100.

Hicks, D.J. Short- and long-term retention of affectively varied modeled behavior. Psychonomic Science, 1968, 11, 369-370.
7. Kniveton, B.H. The effect of rehearsal delay on long-term imitation of filmed aggression. British Journal of Psychology, 1973, 64, 259-265.
8. Bandura, A., Ross, D., and Ross, S.A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.
9. Lefkowitz, M.M., Eron, L.D., Walder, L.O., and Huesmann, L.R. Television violence and child aggression: A followup study. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972. Pp. 35-135.

Lefkowitz, M.M., Walder, L.O., Eron, L.D., and Huesmann, L.R. Preference for televised contact sports as related to sex differences in aggression. Developmental Psychology, 1973, 9, 417-420.
10. Feshbach, S., and Singer, R.D. Television and aggression: An experimental field study. San Francisco: Jossey-Bass, 1971.

- Stein, A.H., and Friedrich, L.K. Television content and young children's behavior. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock (Eds.), Television and social behavior. Vol. 2. Television and social learning. Washington, D.C.: Government Printing Office, 1972. Pp. 202-317.
11. Meyerson, L.J. The effects of filmed aggression on the aggressive responses of high and low aggressive subjects. Doctoral dissertation, University of Iowa, 1966.
 12. Siegel, A.E. Film-mediated fantasy aggression and strength of aggressive drive. Child Development, 1956, 27, 365-378.
 - Lovaas, O.I. Effect of exposure to symbolic aggression on aggressive behavior. Child Development, 1961, 32, 37-44.
 13. Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 5. New York: Academic Press, 1970. Pp. 1-31.
 14. Hicks, D.J. Effects of co-observer's sanctions and adult presence on imitative aggression. Child Development, 1968, 38, 303-309.
 - De Rath, G. The effects of verbal instructions on imitative aggression. Doctoral dissertation, Michigan State University, 1963.
 15. Bandura, A. Influence of models' reinforcement contingencies on the acquisition of imitative responses. Journal of Personality and Social Psychology, 1965, 1, 589-595.
 16. Bandura, A. Vicarious processes: A case of no-trial learning. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 2. New York: Academic Press, 1965. Pp. 1-55.
 17. Larsen, O.N. (Ed.), Violence and the mass media. New York: Harper and Row, 1968.

ISSUE 3: Does television violence affect everyone the same way? Or are different groups affected differently?

No one really believes that all television violence always causes all children to become violent. The serious concern is that watching some forms of television violence will cause some children under some circumstances to become more violent than they would be otherwise.

It is clear that children can and do learn techniques of aggression by watching television (1), and they may also be prompted to carry out these aggressive acts upon both inanimate targets or human victims (2). Of course, not all children are affected in the same way or to the same degree. The actual carrying out of aggressive acts learned through observation appears to depend on a number of factors. For example, aggressive imitation has sometimes been found to be more probable for boys than for girls (3). Two British studies (4), have shown that working class boys are particularly vulnerable to the effects of observed aggression in comparison with middle class boys. A number of researchers (5) have found that those children who are particularly aggressive in everyday life are the ones most likely to be influenced by aggression shown on television.

Young children are particularly vulnerable to the effects of television violence due to their inability to comprehend the motivation or the consequences of the violence that they see (6). Young children are likely to imitate aggressive acts seen on television even when they have been told that these acts are wrong or "naughty" (7). For older children, a parent's warnings can be effective in limiting aggressive imitation, but only when an adult is later present to supervise the child's behaviour (8).

Retarded children may be especially prone to model their behaviour after aggressive television characters (9). Retarded children have been shown to learn and copy the aggressive actions seen on television and to behave more aggressively with their playmates after watching aggressive actors. With retarded children, aggressive behaviours are much more likely to be imitated than nonaggressive, "pro-social" behaviours (10).

Evidence like this can be read two ways. A relatively comforting interpretation is that television violence has a seriously adverse effect on just a limited proportion of children. On the other hand, a man who has conducted a good deal of research on the topic has concluded that: "Perhaps a more defensible conclusion would be that there is a small subgroup of habitually passive and unaggressive children who will not be stimulated to perform aggressively regardless of what they see on television" (11). This is certainly a much less comforting interpretation.

REFERENCES

1. Bandura, A. Aggression: A social learning analysis. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Bandura, A., Ross, D., and Ross, S.A. Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 1961, 63, 575-582.

Bandura, A., Ross, D., and Ross, S.A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.
2. Hanratty, M.A., Liebert, R.M., Morris, L.W., and Fernandez, L.E. Imitation of film-mediated aggression against live and inanimate victims. Proceedings of the 77th annual convention of the American Psychological Association. Washington, D.C.: American Psychological Association, 1969. Pp. 457-458.

Savitsky, J.C., Rogers, R.W., Izard, C.E., and Liebert, R.M. Role of frustration and anger in the imitation of filmed aggression against a human victim. Psychological Reports, 1971, 29, 807-810.
3. Bandura, A., Ross, D., and Ross, S.A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.

Hicks, D.J. Imitation and retention of film-mediated aggressive peer and adult models. Journal of Personality and Social Psychology, 1965, 2, 97-100.
4. Kniveton, B.H. The effect of rehearsal delay on long-term imitation of filmed aggression. British Journal of Psychology, 1973, 64, 259-265.

Kniveton, B., and Stephenson, G. The effect of social class on imitation in a pre-experience situation. British Journal of Social and Clinical Psychology, 1972, 11, 225.
5. Feshbach, S., and Singer, R.D. Television and aggression: An experimental field study. San Francisco: Jossey-Bass, 1971.

Kniveton, B.H., and Stephenson, G.M. An examination of individual susceptibility to the influence of aggressive film models. British Journal of Psychiatry, 1973, 122, 53-56.

Stein, A.H., and Friedrich, L.K. Television content and young children's behavior. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock, (Eds.), Television and social behavior. Vol. 2. Television and social learning. Washington, D.C.: Government Printing Office, 1972. Pp. 202-317.

Wells, W.D. Television and aggression: Replication of an experimental field study. Unpublished manuscript, Graduate School of Business, University of Chicago, 1973.

6. McCarthy, E., Langer, T., Gesten, C., Eisenberg, J. and Orzeck, L. Violence and behavior disorders. Journal of Communication, 1975, 25, 71-85.
7. Grusec, J. Effects of co-observer evaluations on imitation: A developmental study. Developmental Psychology, 1973, 8, 141.
8. Hicks, D.J. Effects of co-observer's sanctions and adult presence on imitative aggression. Child Development, 1968, 38, 303-309.
- De Rath, G. The effects of verbal instructions on imitative aggression. Doctoral dissertation, Michigan State University, 1963.
9. Baran, S., and Meyer, T. Retarded children's perceptions of favorite television characters as behavioral models. Mental Retardation, 1975, 13, 28-31.
10. Fechter, J. Modeling and environmental generalization by mentally retarded subjects of televised aggressive or friendly behavior. American Journal of Mental Deficiency, 1971, 76, 266-267.
- Talkington, L., and Altman, R. Effects of film-mediated aggressive and affectual models on behavior. American Journal of Mental Deficiency, 1973, 77, 420-425.
11. Chaffee, S.H. Television and growing up: Interpreting the Surgeon General's report. Paper presented at the meeting of the American Association for Public Opinion Research, Asilomar, California, March 1972.

ISSUE 4: Can television violence "trigger off" aggressive attacks.

Several years ago, the passengers on a Boeing 707 jetliner were quietly watching an in-flight film as their plane began its ascent over the Rocky Mountains. The film they were watching was "A Twist of Sand", an exciting and violent war story. During the film, the stewardess noticed that one of the passengers, a 24 year old man listed as Jerry Joseph Deutchman, was "starting to act funny." As he became increasingly violent the plane's captain was called from the cockpit. When the uniformed captain approached, the agitated passenger attacked him. In the melee that followed, at least five passengers were involved in the fight to subdue Deutchman. Finally, after an unscheduled landing, he was removed from the plane by Government officials. During his arraignment, Deutchman explained that he had started fighting because of the fighting that he had watched in the war movie (1).

This is just one of a large number of well documented instances where violence in films and television has apparently triggered off criminal actions and violent attacks (2). Skeptics, however, quite rightly point out that this kind of anecdotal evidence does not prove that the violence shown in films and television is an important contributor to aggression in society. In the airplane incident, the passenger may have been distraught or mentally unstable to begin with. Other examples may also have involved unusual individuals or extreme circumstances. In recent years, research psychologists have been concerned with the possibility that the kind of violence shown in the entertainment media may also stimulate aggressiveness in ordinary people under more normal circumstances.

The earliest systematic research on this issue was conducted in Canada by Richard Walters (3) and his associates at the University of Waterloo. Their strategy was to create a controlled situation where aggressiveness, the willingness to inflict pain, could be measured objectively following the exposure of subjects to either an aggressive film or to a nonaggressive control film. The entire procedure was disguised as a "study of learning based on punishment" in order to keep subjects from suspecting the actual purpose of the study. Since their basic experiment has subsequently been repeated many times in research done in Europe and the United States, it is worthwhile to go into some of the details of their research procedure. In one study (4), the subjects (adult men) were led to believe that they were participating in an experiment on the effects of punishment in association learning. The subjects administered punishing electric shocks to a learner every time the learner made an association error. The errors were signaled on a display board in front of the subject, and the signals were secretly programmed so that 15 out of the 30 trials were registered as errors. After each "error," the subject selected one of the eleven intensity levels of the electric shock used as punishment. Following an initial series of 30 trials, half of the subjects saw a film clip from a commercial movie showing two teenage boys engaged in a vicious knife fight. The remaining subjects saw the nonaggressive control film dealing with art work. Everyone was then given a second series of 30 trials in which they again punished the learner's errors with electric shocks. Analysis of the pre-film to post-film changes in the average intensity of shocks showed that the group given the aggressive film had shifted to a significantly higher punishment level than had the control group. Aggression scores based on shock duration showed a similar outcome. Walters and Thomas (5) have used this same experimental paradigm with a number of different subject populations, and have consistently

found the same pattern of results with groups of teenagers, male adults. and female adults.

In these studies, and in over twenty subsequent replications and extensions conducted by researchers in Europe and in the United States over the past fifteen years, the results have been the same; exposure to film and television violence produces increased aggressiveness (6). Some of these controlled laboratory studies have demonstrated that there are particular circumstances under which filmed violence is especially likely to facilitate aggressive behavior. The emotional state of the viewer is one such factor, and the dramatic context of the observed violence is another.

A number of experiments (7) have found that angered viewers are particularly affected by watching violence. When subjects were angered by insults or by unfair judgments they retaliated with more shocks, but when this occurred in combination with a violent film, the shocks were greatly increased. One interpretation of these findings is that anger by itself increases the desire to be aggressive and then watching violence serves to lower the inhibitions against expressing this aggression.

Another likely factor influencing inhibitions is whether or not the observed violence is perceived as being warranted or justified within the fictional context in which it occurs. In one of several experiments that have investigated this point (8), subjects were either angered or not angered and were then shown a boxing film that was given in one of two alternate versions. In one version, the boxer was represented as being a villainous character well deserving of the beating he received (justified version). Alternatively, he was represented as the victim of unfortunate circumstances, and an admirable, generally sympathetic character (unjustified version). Both in terms of the number and the duration of

shocks, the highest level of aggression was obtained from angered subjects who had been given the justified film version.

Another recent study (9) was designed to examine more closely some of the factors that define the justification of violence. College students in a learning experiment were first angered when they received an unfairly large number of electric shocks from someone posing as a fellow subject. Following the presentation of the fight film, the situation was reversed and subjects were given an opportunity to give shocks to him as punishment for his errors on the learning task. The experimental variations in this study centered on the type of introduction provided for the film sequence. Four conditions were formed by the combination of the presence or absence of two different types of justification for aggression. In one condition, the justification was based on the vengeance motive--the eventual victor was seen as avenging an unfair beating that he had previously received. Justification in a second condition was based on the self-defence motive with the victor portrayed as defending himself in a "kill or be killed" situation. A third condition was formed by a combination of these two motives, and a fourth condition served as a control group with no mention of any justifying circumstances. The results, in terms of the number and duration of shocks given, showed the lowest level of post-film aggression in the condition where no justification was provided. Subjects in the vengeance justification condition gave more shocks than did subjects give either the neutral introduction or the self-defence justification. One interpretation of these results stresses the degree of similarity between the situation of the subject and aggressive actor. In the two conditions which included the vengeance justification, the subject, who had himself been unfairly abused by the confederate, may have been influenced by motives similar to those portrayed in the film. This

correspondence, of course, would be absent on the other two conditions. Thus, the inhibiting or facilitating effects of filmed aggression may depend, in part, on the similarity of the context of the film and the viewer's perception of his own situation.

The findings of these various studies are generally consistent with the idea that inhibition of aggression results when an angered viewer watches violence in a context where the violence is not justified. On the other hand, the aggression stimulating effects have been most evident when violence is seen in a justified context. This last point is particularly ironic in light of television programming policies. In showing that "crime does not pay" by depicting the hero's successful and justified use of violence against the "bad guys," the producers may be creating the very conditions that are most likely to trigger aggressive responses in the viewers.

Anecdotal examples of film and television violence appear to be well supported by the results of these experimental studies. However, skeptics have still raised questions about the generalizability of laboratory findings to real life situations. Perhaps electric shocks as they are given in these experiments are not an appropriate measure of aggression (10). Or perhaps the artificial setting of the laboratory situation invalidates any generalizations to the real world (11). Some of these sort of objections can be answered, but the committed skeptic will probably remain unconvinced.

The inherent limitations of laboratory research have led a number of researchers to conduct "field experiments" on film and television violence effects. Two such experiments (12) have produced inconclusive results (13). A third experiment (14) conducted with a small number of children who were observed in their normal setting, found a significant increase in interpersonal aggression in some of the children exposed to violent television programs.

The most convincing evidence thus far comes from three naturalistic field experiments (15), two of them conducted in the United States and one in Europe. In these studies groups adolescent delinquents were shown commercial films for five successive nights as part of their normal activities. For some of the groups, the selected films were highly violent. For the other groups the films were uniformly nonviolent. The results showed that the boys who saw the violent films later engaged in higher real life aggression than did the boys who saw the nonviolent films. Here again the results support the conclusion that media violence increases the aggressive behaviour of the viewers.

Anecdotal evidence, laboratory findings, and the results of field experiments converge on the same conclusion: observed violence produces heightened aggressiveness. It is not yet possible to make precise estimates of the overall impact on society of the kind of violence routinely shown in the entertainment media. However, even if aggressive attacks are triggered off in only a small proportion of the viewers, when as many as 40,000,000 people watch a brutal scene of television violence, we can be sure that people will be hurt as a result.

REFERENCES

1. Toronto Globe and Mail (Reuters), March 14, 1969.
 2. Schramm, W., Lyle, J., and Parker, E.B. Television in the lives of our children. Stanford, Ca.: Stanford University Press, 1961.
- United States Congress. Senate Committee on the Judiciary. Hearings before the Subcommittee to Investigate Juvenile Delinquency. Juvenile delinquency. Part 10. Effects on young people of violence and crime portrayed on television. 87th Congress, 1st and 2nd sessions. June 8, 1961-May 14, 1962. Washington, D.C.: Government Printing Office, 1963.
3. Walters, R.H. Implications of laboratory studies of aggression for the control and regulation of violence. In M.E. Wolfgang (Ed.), Patterns of violence. Annals of the American Academy of Political and Social Science. Vol. 364. Philadelphia: The American Academy, 1966, Pp. 60-72.
 4. Walters, R.H., Thomas, E.L., and Acker, C.W. Enhancement of punitive behavior by audio-visual displays. Science, 1962, 136, 872-873.
 5. Walters, R.H., and Thomas, E.L. Enhancement of punitiveness by visual and audiovisual displays. Canadian Journal of Psychology, 1963, 17, 244-255.
 6. Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 5. New York: Academic Press, 1970. Pp. 1-31.
- Murray, J.P., Rubinstein, E.A., and Comstock, G.A. (Eds.), Television and social behavior. Vol. 2. Television and social learning. Washington, D.C.: Government Printing Office, 1972.
7. Berkowitz, L. The effects of observing violence. Scientific American, 1964, 21, 35-41.
- Berkowitz, L., and Geen, R.G. Stimulus qualities of the target of aggression: A further study. Journal of Personality and Social Psychology, 1967, 5, 364-368.
- Berkowitz, L., and Rawlings, E. Effects of film violence on inhibitions against subsequent aggression. Journal of Abnormal and Social Psychology, 1963, 66, 405-412.
8. Berkowitz, L. Some aspects of observed aggression. Journal of Personality and Social Psychology, 1965, 2, 359-369.
 9. Hoyt, J.L. Effect of media violence "justification" on aggression. Journal of Broadcasting, 1970, 14, 455-464.

10. Kane, T., Joseph, J., Tedeschi, J. Person perception and the Berkowitz paradigm for the study of aggression. Journal of Personality and Social Psychology, 1976, 33, 663-673.
 11. Howitt, D. and Cumberbatch, G. Mass Media Violence and Society. Wiley: New York, 1975.
 12. Feshbach, S. and Singer, R.D. Television and aggression: An experimental field study. San Francisco: Jossey-Bass, 1971.
- Stein, A.H., and Friedrich, L.K. Television content and young children's behavior. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock (Eds.), Television and social behavior. Vol. 2. Television and social learning. Washington, D.C.: Government Printing Office, 1972. Pp. 202-317.
13. Leyens, J.P., Parke, R.D., Camino, L., and Berkowitz, L. The effects of movie violence on aggression in a field setting as a function of group dominance and cohesion. Journal of Personality and Social Psychology, 1975, 32, 346-360.
- Liebert, R.M., Davidson, E.S., and Sobol, M.P. Catharsis of aggression among institutionalized boys: Further discussion. In G.A. Comstock, E.A. Rubinstein, and J.P. Murray (Eds.), Television and social behavior. Vol. 5. Television's effects: Further explorations. Washington, D.C.: Government Printing Office, 1972. Pp. 366-373.
- Liebert, R.M., Sobol, M.D., and Davidson, E.S. Catharsis of aggression among institutionalized boys: Fact or artifact. In G.A. Comstock, E.A. Rubinstein, and J.P. Murray (Eds.), Television and social behavior. Vol. 5. Television's effects: Further explorations. Washington, D.C.: Government Printing Office, 1972. Pp. 351-359.
14. Steuer, F.B., Applefield, J.M., and Smith, R. Televised aggression and the interpersonal aggression of preschool children. Journal of Experimental Child Psychology, 1971, 11, 442-447.
 15. Parke, R.D., Berkowitz, L., Leyens, J.P., West, S., and Sebastian, R.J. Film violence and aggression: A field experimental analysis. Journal of Social Issues, in press.
- Leyens, J.P., Parke, R.D., Camino, L. and Berkowitz, L. The effects of movie violence on aggression in a field setting as a function of group dominance and cohesion. Journal of Personality and Social Psychology, 1975, 32, 346-360.
- Parke, R.D., Berkowitz, L., Leyens, J.P., West, S., and Sebastian, R. The effects of repeated exposure to movie violence on aggressive behavior in juvenile delinquent boys: Field experimental studies. In L. Berkowitz, (Ed.), Advances in experimental social psychology. New York: Academic Press, in press.

Parke, R.D. Field experimental approaches to children's aggression:
Some methodological problems and some future trends. In
W.W. Hartup and J. de Wit (Eds.), Determinants and origins
of aggressive behavior. The Hague: Mouton, in press.

ISSUE 5: Does television violence result in the blunting of emotional reactions to observed violence? Does television violence produce an insensitivity to violence in real life?

Canadian viewers are exposed to an enormous amount of television violence (1). This has caused many parents to be concerned that television violence may increase the level of real life violence that their children encounter in everyday life. And there seems to be substantial research evidence to support this concern (2).

But there is another concern as well. Perhaps the abundance of violence and brutality in the mass media has the effect of blunting the emotional sensitivity of the viewers, both children and adults. There is observational data and physiological evidence that both children and adults are normally made anxious or affected emotionally when they see unusual violence in the media (3). But what happens when scenes of violence are repeated again and again? A general principle of psychology is that when an emotional response is repeatedly provoked, there is a progressive decrease in the strength of the emotional response. Habituation is the technical term that has been given for this process of emotional blunting. For example in one early study, (4) adults saw a victim receive an extended series of electrical shocks. The strength of the observers' galvanic skin response (a measure of emotional impact) was high at first, but typically the emotional response declined with each successive shock. This habituation process occurred even when the victim was seen to jerk convulsively with each shock. Several other studies (5) have measured physiological responses of adult observers watching a film dealing with a primitive tribal ritual called subincision. A series of different victims were shown, each one subjected to

a bloody and painful genital mutilation. Again the process of habituation was apparent. The emotional responses showed a marked decrease following the first episode and additional habituation occurred with each succeeding scene of violence. Additional laboratory experiments have demonstrated habituation to repeated showings of films of industrial accidents and scenes of military atrocities (6). From these studies it is reasonable to conclude that television viewers will become progressively less emotionally responsive to repeated observation of scenes of violence shown on television.

In fact, a recent experiment has confirmed that a blunting of emotional responses does occur in children exposed to high levels of television violence (7). This study compared the emotional responses of children who were habitual television watchers with the emotional responses of children who had little exposure to television and television violence. Individual children in both these groups were shown several brief films including a comedy film, a film about skiing, and a violent sequence from a commercial film about boxing. Physiological measures of emotional arousal were taken as the children watched the film. The results showed relatively little difference between the two groups in their emotional reaction to the nonviolent portions of the films. For the violent portions of the films, however, there was much less emotional response from the boys with high exposure to television. Apparently they had seen so much television that they were no longer sensitive to the kind of violence that is routinely shown on entertainment television.

One possible implication of these findings is that if children become habituated to violence on television then they may become more accepting of violence when it occurs in real-life, face-to-face situations. Normally, children do not tolerate aggression very comfortably, either in themselves or in others (8). One might say that normal children typically have an

aversion to serious physical aggression. It may be, however, that constant exposure to violence on television has the effect of "curing" this aversion in children who are heavy television watchers. Some related research seems to support this possibility (9). Children with an aversion to dogs were shown a number of films of dogs and children playing with dogs over a period of time. These children who had originally been very frightened of dogs, became, after watching the films, much less fearful of the dogs. In some cases, after repeated exposure, they became willing to touch the dogs or actually play with the dogs. The concern here is that children who see large amounts of television violence may be "cured" of their aversion to violence in the same way that the children were cured of their aversion to dogs. Certainly there is evidence that children who watch a great deal of television violence later turn out to be more aggressive adolescents, but the process through which this comes about is not certain (10).

A recent series of laboratory experiments (11) indicates that exposure to television violence can increase ordinary children's toleration of real life aggression. In these studies boys and girls from Grade Three and Grade Four were taken individually to a game room where half of them were shown a particularly violent portion from a cowboy movie, while the other half played with toys without seeing any film. The experimenter then asked each child individually to watch over some young playmates in a room nearby. They could be seen through a television monitor. The child was told to call for help if anything seemed to be going wrong. For the first minute or so, the two playmates could be seen on the monitor quietly playing with blocks (actually, unknown to the child, this was shown from a standardized videotape). After this the playmates could be seen arguing then fighting with one another, pushing and shoving until it appeared that real harm was

being done. The experimenter measured how long it took for each child to go for help. The children who had previously seen the violent film appeared to be relatively indifferent to the fighting going on next door. They took significantly longer on the average to go for help than did the children who had not watched the film. This experiment has been repeated with older children and with different types of aggressive films shown over television. The results have consistently confirmed the finding of the original study, strongly suggesting that continued exposure to television may cause children to become more passive and accepting of aggression when it actually occurs in real life.

REFERENCES

- Gerbner, G., and Gross, L. Living with Television: The violence profile. Journal of Communication, 1976, 26, 173-194.
- Liebert, R.M., Neale, J.M., and Davidson, E.S. The early window: Effects of television on children and youth. Elmsford, N.Y. Pergamon Press, 1973.
- Goranson, R.E. The catharsis effect: Two opposing views. In R.K. Baker and S.J. Ball (Eds.), Violence and the media. A staff report to the National Commission on the Causes and Prevention of Violence. Washington, D.C.: Government Printing Office, 1969, Pp. 453-459.
- Berger, S. Conditioning through vicarious instigation. Psychological Review, 1962, 69, 405-456.
- Lazarus, R. Psychological Stress and the coping process. New York: McGraw-Hill, 1966.
- Lazarus, R., & Alfert, E. The short-circuiting of threat. Journal of Abnormal and Social Psychology, 1964, 69, 195-205.
- Speisman, J., Lazarus, R., Mordkoff, A., & Davidson, L.A. Experimental reduction of stress based on ego-defence theory. Journal of Abnormal and Social Psychology, 1964, 68, 367-380.
- Manglesdorff, A., and Zuckerman, M. Habituation of scenes of violence. Psychophysiology, 1975, 12, 125-130.
- Cline, V.B., Croft, R.G., and Courrier, S. Desensitization of children to television violence. Journal of Personality and Social Psychology, 1973, 27, 360-365.
- Sears, R., Maccoby, E., & Levin, H. Patterns of Child Rearing. New York: Harper, 1957.
- Bandura, A., Grusec, J., and Menlove, F. Vicarious extinction of avoidance behavior. Journal of Personality and Social Psychology, 1967, 5, 16-23.
- Bandura, A., and Menlove, F. Factors determining vicarious extinction of avoidance behavior through symbolic modeling. Journal of Personality and Social Psychology, 1968, 8, 99-108.
- Eron, L.D., Lefkowitz, M.M., Walder, L.O., and Huesmann, L.R. Relation of learning in childhood to psychopathology and aggression in young adulthood. In A. Davids (Ed.), Child Personality and Psychopathology: Current topics. Vol. 1. New York: Wiley, 1974.
- Drabman, R.S., and Thomas, M.H. Does media violence increase children's toleration of real-life aggression? Developmental Psychology, 1974, 10, 418-421.
- Drabman, R.S. and Thomas, M.H. Exposure to filmed violence and children's tolerance of real-life aggression. Paper presented at the annual meeting of the American Psychological Association, New Orleans, 1974.
- Drabman, R.S. and Thomas, M.H. Does watching violence on television cause apathy? Pediatrics, in press.
- Thomas, M.H. and Drabman, R.S. Toleration of real-life aggression as a function of exposure to televised violence and age of subject. Merrill-Palmer Quarterly, 1975, 21, 227-232.

Drabman, R.S. and Thomas, M.H. Exposure to filmed violence and children's tolerance of real-life aggression. Paper presented at the annual meeting of the American Psychological Association, New Orleans, 1974.

Drabman, R.S. and Thomas, M.H. Does watching violence on television cause apathy? Pediatrics, in press.

Thomas, M.H. and Drabman, R.S. Toleration of real-life aggression as a function of exposure to televised violence and age of subject. Merrill-Palmer Quarterly. 1975, 21, 227-232.

ISSUE 6: What about "catharsis"? Can an angry person "get it out of his system" by watching violence on television?

The myth of "vicarious aggression catharsis" continues to crop up in discussions of television violence effects (1). The basic idea is that an angry person's aggressiveness may be somehow "drained off" by watching violence. The purpose here is to point out that the whole idea of vicarious aggression catharsis stems from a misunderstanding of Aristotle's original concept of catharsis. A further purpose is to point out that both common sense and a large body of research evidence stand in direct contradiction to the notion of "vicarious aggression catharsis."

Catharsis of Grief or Sorrow

Aristotle used the word catharsis in connection with the "tragic" feelings of sorrow and anguish (2). He pointed out that when people are feeling depressed, they are often strongly affected by seeing a tragic play. During the performance, their feelings of sadness may be intensified even to the point of weeping or crying. But after the play is over, these feelings are greatly reduced. Thus vicarious tragic experience can serve to "drain off" the tragic feelings. Of course, the process of catharsis can be described in more modern terms. When people are feeling "blue," seeing a good "tear jerker" may afford them some relief--they feel better after having a good cry.

Note that Aristotle's original term "catharsis" referred only to the draining off of tragic feelings. It did not apply to feelings of aggression. Only recently has anyone suggested that catharsis might also occur with emotions other than the tragic feelings of sorrow and pity.

Vicarious Catharsis of Hunger or Lust?

How well does the catharsis notion apply to other motives and emotions? Not very well. Take the example of a person feeling the pangs of hunger. A concept of "vicarious hunger catharsis" would suppose that feelings of hunger could be somehow drained off by watching someone eat a delicious meal. On common sense grounds this certainly does not seem very plausible. Nor does the idea of "vicarious lust catharsis." Common sense does not suggest that feelings of sexual arousal will be reduced just by viewing explicitly erotic material. Common sense and research argues against the likelihood of both of these forms of vicarious catharsis, and common sense alone should make us skeptical of the notion of vicarious aggression catharsis. Why should we suppose that watching scenes of brutality and violence will serve to drain away feelings of hostility or aggression? We should require strong evidence before accepting such a strange idea.

Research Findings

The evidence in fact does not support the idea of vicarious aggression catharsis. On the contrary, carefully controlled laboratory studies have consistently shown that the observation of violence serves to increase subsequent aggressiveness.

The early research on this issue was conducted in Canada by Professor Richard Walters (3) and his co-workers at the University of Waterloo. Their approach was straightforward. They arranged a situation where aggressiveness, defined as the willingness to inflict pain, could be measured objectively following the exposure of subjects to either an aggressive film or to a nonaggressive control film. As described above, the entire procedure was disguised as a "study of learning based on punishment" in order to

keep subjects from suspecting the actual purpose of the study. Some of the details of their research procedure should be given because their method has served as a prototype for a great deal of the subsequent research conducted in Europe and in the United States. In one study (4), the subjects (adult men) were led to believe that they are participating in a study of the effects of punishment on association learning, and were asked to administer punishing electric shocks to a learner every time the learner made an association error. The errors were signaled on a display board in front of the subject, and the signals were secretly preprogrammed so that 15 out of the 30 trials were registered as errors. After each "error", the subject was to select one of the eleven intensity levels of the electric shock used as punishment. Following an initial series of 30 trials, subjects saw a film clip from a commercial movie showing two teenage boys engaged in a vicious knife fight. The remaining subjects saw the nonaggressive control film dealing with art work. Everyone was then given a second series of 30 trials in which they again punished the learner's errors with electric shocks. Analysis of the pre-film to post-film changes in the average intensity of shocks showed that the group given the aggressive film had shifted to a significantly higher punishment level than the control group. Aggression scores based on shock duration showed a similar outcome. Additional research (5) has used this same experimental paradigm with a number of different subject populations, and has consistently found the same pattern of results with groups of teenagers, male adults, and female adults.

In these studies and in over twenty subsequent replications and extensions conducted by researchers in Europe and in the United States over the past fifteen years, the results have been the same; exposure to

film or television violence more often produces an increase rather than a decrease in later aggressiveness (6). Obviously these results do not support the idea of vicarious aggression catharsis. In fact they directly contradict it. Even those who argue for some possible positive effects from television violence no longer subscribe to the vicarious aggression catharsis notion (7).

Vicarious Catharsis: Sorrow In Contrast With Aggression

There is of course a crucial difference between sorrow and aggression with respect to the concept of vicarious catharsis. Performance of a tragedy in the ancient theatres of Greece or in modern day films or television can serve to stimulate or trigger off actual weeping or crying in the viewer--the overt expression of the aroused feelings. Observed violence may similarly arouse feelings of aggressiveness, but these feelings cannot be given immediate expression either in the theater or the home. These feelings must be inhibited, "bottled up", until they subside or until an acceptable or available target can be found.

Catharsis as described by Aristotle is possible because grief and sorrow can be given immediate expression. But this is not so with aggression. Lack of attention to this crucial difference has helped to perpetuate the myth of vicarious aggression catharsis in the face of common sense and research evidence.

Discarding the Myth

The myth of vicarious aggression catharsis has been persistent (the apologists for television violence have of course promoted the myth wherever possible). The time has come to discard the myth. The idea of vicarious aggression catharsis does not come from Aristotle, it runs counter to common sense, and it is contradicted by a large body of research. And, more importantly, this persistent myth contributes

continuing confusion to the serious and difficult issues of evaluating the benefits and costs of violence in the media and its regulation.

REFERENCES

1. Singer, J.L. The influence of violence portrayed in television or motion pictures upon overt aggressive behavior. In J.L. Singer (Ed.), The Control of Aggression and Violence: Cognitive and Physiological Factors. New York: Academic Press, 1971. Pp. 19-56.
 2. Berczeller, E. The "Aesthetic Feeling" and Aristotle's Catharsis Theory. Journal of Psychology, 1967, 65, 261-271.
 3. Walters, R.H. Implications and laboratory studies of aggression for the control and regulation of violence. In M.E. Wolfgang (Ed.), Patterns of Violence. Annals of the American Academy of Political and Social Science. Vol. 364. Philadelphia: The American Academy, 1966. Pp. 60-72.
 4. Walters, R., Thomas, E., and Acker, C. Enhancement of punitive behavior by audio-visual displays. Science, 1962, 133, 372-373.
 5. Walters, R., and Thomas, E. Enhancement of punitiveness by visual and audio-visual displays. Canadian Journal of Psychology, 1963, 17, 244-255.
 6. Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology. Vol. 5. New York: Academic Press, 1970. Pp. 1-31.
- Murray, J.P., Rubinstein, E.A., and Comstock, G.A. Television and Social Behavior, Vol. II: Television and Social Learning. Washington, D.C.: Government Printing Office, 1972.
7. Feshbach, S., and Singer, J. Television and Aggression. San Francisco: Jossey-Bass, 1971.

ISSUE 7: Are there positive effects of television violence?

The benefits and potential benefits of television as a whole are very great. But the benefits of one aspect of the medium, television violence, are much less evident. And those positive effects that have sometimes been claimed for television violence bear close examination.

Letting Off Steam?

It is sometimes claimed that angry people can "let off steam" by watching violence on television. Unfortunately there is very little evidence that this is true (1). The results of a good deal of psychological research give support to exactly the opposite view -- angry persons tend to become more aggressive after watching violent material (2). The aggression stimulating effects of observed violence have been found in closely controlled laboratory studies (3), and the same effects have also been obtained in several naturalistic field studies with violent films of the type often seen on television (4). The old idea that television violence helps to "let off steam", is a favourite of the television promoters, unfortunately the idea itself does not seem to "hold water."

Learning that Crime Does not Pay?

Another virtue often claimed for television violence is that it teaches the lesson that "crime does not pay." This claim is somewhat difficult to assess, but there are a number of reasons for being skeptical. The "crime does not pay" theme is often obscured by other more immediate themes. A detailed analysis (5) of the content of popular television programs of the 1960s showed that violence was the single most popular means employed by all characters to reach their goals, and that socially

disapproved methods, particularly violence, were more frequently portrayed as being successful than were socially approved methods. Putting it more simply, the television message is that "violence does pay." We should also remember that children, especially young children, may easily misunderstand even the simplest television plot (6). Children are likely to comprehend aggression and its immediate effectiveness but not the full complex motives and consequences surrounding aggressive action (7). When the story is interrupted by commercials, even Grade Three children are unlikely to grasp the "crime does not pay" theme.

The heroes and lawmen, of television drama use violence with relative impunity (8) even though they may themselves be in clear violation of the law (9). Some researchers have suggested that the actions of the aggressive hero serve to teach children that it is all right to be brutal as long as you are a "good guy" (10). And what child does not think of himself as a good guy?

Entertainment Value and Relief From Boredom

Clearly, television has great entertainment value; it is an important source of relaxation and enjoyment for an enormous number of people. But, as every viewer can testify, television programs can also be very boring. The reason for this is not difficult to understand; North American television audiences consume enormous amounts of fresh television material every day. Program producers are hard pressed to produce consistently new and interesting material; the available creative talent and the available money are simply no match for the appetite of the viewing public. Producers are often stuck with poor scripts for programs that must be made in a hurry. The result is programs that follow a well-worn formula, programs are stereotyped, predictable and, in a word, dull. Producers are thus faced with

the problem of how to spice up dull scripts. One easy and relatively inexpensive solution to the problem is to include generous amounts of violence. Where the story line is dull or confused, or where the action is too slow, audience interest can be revived with a fist-fight, a shoot-out, or a wild car chase written into the script (11). Thus violence can be used to maintain audience size, program ratings, and, ultimately, advertising revenue. The inclusion of violent material in this process is not an artistic decision, but it is part of a production formula geared ultimately to generating profit (12).

In this sense television violence is of great value and benefit -- to television program producers. But what is its social value? If the quick and easy use of cliché violence was less available, better, more ingenious, more creative television programming might be produced more often.

REFERENCES

1. Feshbach, S. The catharsis effect: Research and another view. In R.K. Baker and S.J. Ball (Eds.), Violence and the media. A staff report to the National Commission on the Causes and Prevention of Violence. Washington, D.C.: Government Printing Office, 1969. Pp. 461-472.

Feshbach, S. and Singer, R.D. Television and Aggression: An Experimental Field Study. San Francisco: Jossey-Bass, 1971.
2. Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology. Vol. 5. New York: Academic Press, 1970. Pp. 1-31.
3. Berkowitz, L. The effects of observing violence. Scientific American, 1964, 21, 35-41.

Berkowitz, L., and Alioto, J.T. The meaning of an observed event as a determinant of its aggressive consequences. Journal of Personality and Social Psychology, 1973, 27, 206-217.
4. Berkowitz, L., and Rawlings, E. Effects of film violence on inhibitions against subsequent aggression. Journal of Abnormal and Social Psychology, 1963, 66, 405-412.

Steuer, F.B., Applefield, J.M., and Smith, R. Televised aggression and the interpersonal aggression of preschool children. Journal of Experimental Child Psychology, 1971, 11, 442-447.
5. Larsen, O.N., Gray, L.N., and Fortis, J.G. Goals and goal-achievement in television content: Models for anomie? Sociological Inquiry, 1963, 33, 180-196.
6. Chaffee, S.H. Television and adolescent aggressiveness (overview). In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972, Pp. 1-34.

Leifer, A.D., and Roberts, D.F. Children's responses to television violence. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock (Eds.), Television and social behavior. Vol. 2. Television and social learning. Washington, D.C.: Government Printing Office, 1972. Pp. 43-180.
7. Collins, W.A., Berndt, T.J., and Hess, V.L. Observational learning of motives and consequences for television aggression: A developmental study. Child Development, 1974, 45, 799-802.

8. Gerbner, G. Violence in television drama: Trends and symbolic functions. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 1. Media content and control. Washington, D.C.: Government Printing Office, 1972. Pp. 28-187.
9. National Report, TV Policemen Become More Lawless, Intellect, 1974, 103, 82.
10. Liebert, R.M., and Poulos, R.W. Television as a moral teacher. In T. Lickona (Ed.), Man and morality: Theory, research, and social issues. New York: Holt, Rinehart and Winston, 1974.
11. Baldwin, T.F., and Lewis, C. Violence in television: The industry looks at itself. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 1. Media Content and Control. Washington, D.C.: Government Printing Office, 1972. Pp. 290-373.
12. Cantor, M.G. The role of the producer in choosing children's television content. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 1. Media content and control. Washington, D.C.: Government Printing Office, 1972. Pp. 259-289.

ISSUE 8: Is it particularly harmful for blood, pain and death to be shown on television?

Horror and violence are certainly not the same thing, and yet they are sometimes confused. Violence is shown on Canadian entertainment television in great quantities--beatings, stabbings, and shootings are a prominent feature of most "action" programmes (1). Horror is much more rarely shown. Horror in this context refers to the normal aftermath of violence--blood, injury, pain, and suffering. George Gerbner (2), who has conducted a number of systematic studies of the content of television programs notes that television violence stuns or kills without much visible hurt -- suffering is difficult to detect, making violence appear painless.

Under public pressure, the television industry has periodically promised to clean up television violence. Instead of reducing violent content, however, television producers have moved to "pretty-up" the ugly aftermath of violence. For example, a leading radio and television trade magazine (3) quotes one television producer as saying "Anything that shows too much agony, too much punishment, or is too bloody, anything that could be too startling, whether it is in context or whether it was done for good and valid reasons, is being taken out or reduced wherever possible."

The meaning of violence has been systematically falsified. Violence has been made to appear more acceptable by the elimination of its grotesque and horrific aspects. This is objectionable in itself, and it is all the more objectionable when this is offered as a response to public concern over the impact of the violence shown in entertainment television.

There is an additional ironic aspect to this practice of deleting the horrific aspects of violence. It may be that when television violence is shown, the injuries should also be shown--in bloody and horrible detail. There is, to begin with, a good deal of research evidence indicating that the kind of violence shown on television has the effect of increasing aggressiveness in many persons (4). Ironically this aggressiveness may be greatest when the bloody and horrible consequences of violence are downplayed. The results of several research studies clearly suggest that watching scenes of violence, viewers are more aggressive when images of blood, pain or horror have been eliminated.

An experiment conducted by Donald Hartmann (5) at Stanford University involved teenaged juvenile delinquents who were shown a film centering around a basketball game. The film was prepared in several versions. In one version the game was interrupted by a rather one sided fist-fight that focused on the attack, showing punching fists, kicks, and angry faces and voices. Another version showed the same fight but focused on the plight of the victim with close-ups of the pain on his face as he was knocked down groaning and crying. After seeing one or the other of these versions, each boy was given the chance, as part of a learning task, to give electric shocks to another boy. For the subjects who were not insulted or otherwise angered by the other boy, the greatest aggression in terms of the shocks given came from those who saw the attack version. Significantly less aggression was shown by the boys who had seen the version stressing the pain and suffering of the victim.

Similar results have been obtained in a study of college students (6). These subjects were initially angered when they received an unfairly large number of shocks as a judgement of their own task performance in an experiment in education. Each subject then saw a film of a highly aggressive

boxing match with several alternative taped endings. One ending stressed a positive outcome with the boxer leaving the ring in good physical condition and later going on to a life of success and fame. An alternate ending depicted a highly negative outcome with stress on the defeated boxer's injuries, a cerebral hemorrhage, extreme agony, and painful death. After the film, the subjects were themselves put in the position of giving shocks to another person. The number of shocks they administered was significantly less following exposure to the negative outcome version.

The horror that results from violence seems to have a sobering effect. The excitement and aggression stimulating effects of showing aggressive attacks may be at least partly counteracted by showing the realistic consequences of aggression as well. Of course, television viewers might be discomforted if the consequences of violence were realistically portrayed. These viewers might complain, and program producers want very much to avoid complaints. So an ingenious though cynical solution was put forth. Striking a virtuous pose, the producers promised to "clean up" television violence. Then, without noticeably reducing the rate of shootings, stabbings, and other acts of mayhem, they systematically cut out scenes showing blood or pain. They "cleaned up" television violence by prettying up, or entirely omitting, the real consequences of violence. Ironically in doing this they may have created the very conditions that are most likely to have harmful social consequences.

REFERENCES

1. Gerbner, G. Comments on "Measuring violence on television; The Gerbner index," by Bruce M. Owen (Staff Research Paper, Office of Telecommunications Policy). Unpublished manuscript, Annenberg School of Communications, University of Pennsylvania, 1972.

Gerbner, G. Violence in television drama: Trends and symbolic functions. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 1. Media content and control. Washington D.C.: Government Printing Office, 1972. Pp. 28-187.
2. Gerbner, G. and Gross, L. Living with television: The violence profile. Journal of Communication, 1976, 26, 173-194.
3. Broadcasting, August 19, 1968, p.23.
4. Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 5. New York: Academic Press, 1971. Pp. 1-31.

Murray, J.P. Television and violence: Implications of the Surgeon General's research program. American Psychologist, 1973, 28, 472-478.
5. Hartman, D.P. Influence of symbolically modeled instrumental aggression and pain cues on aggressive behavior. Journal of Personality and Social Psychology, 1969, 11, 280-288.
6. Goranson, R. Observed violence and aggressive behavior: The effects of negative outcomes to the observed violence. Doctoral Dissertation, University of Wisconsin, 1969.

ISSUE 9: When parents and children are watching television together, can parents' reactions and comments influence the impact of television violence on the children?

Many parents are concerned that their children may be influenced by the violence shown so abundantly on television. In fact, there is a good deal of research evidence to support this concern. Children do learn new forms of aggression by seeing them performed on television (1). Their actual aggressive behaviour may also be increased (2). In addition, children's feelings and attitudes about aggression may be largely shaped by the violence that they see on television (3).

What can parents do about this? One thing they can do is to simply turn off the television set or refuse to allow their children to watch objectionable programs. This solution may be easy in theory, but it is very difficult in practice--as almost every parent knows. In fact, some recent research in the United States has shown that it is principally the children who control the family television set, and it is the parents who often ask their children for advice on program selection (4). Even in households where parents retain some measure of control over the choice of programs, children are still likely to see a good deal of violence simply because such a large proportion of entertainment television contains violent action (5).

An alternative parental approach has been suggested. While watching television with the children, it is possible for parents to take a highly active role in interpreting, evaluating, and commenting on the action shown on the program. While this may be taxing for adults and while it may

interfere with the adults' own enjoyment of the program, there is some limited research evidence that this kind of active interpretation and evaluation of the television material can modify the impact that it has on young viewers. One controlled experiment (6) investigated this possibility by having children watch a televised, aggressive actor while the children were in the presence of an adult. The adult appeared to be involved in the program and spontaneously made a variety of positive evaluative comments ("Boy look at him go" ... "He sure is a tough guy") for one set of subjects, and a number of negative comments ("He shouldn't do that" ... "That's awful") for another group. In a control group, the adult simply remained silent. The effect of these evaluative comments appeared later when the subjects were put into the test situation that was similar to the situation shown on television. Under the watchful eye of the adult, those children who had heard the positive comments showed a high level of imitative aggression, while those who heard the negative comments showed a reduced level of aggression in comparison with the children in the control condition. Children in three additional conditions were treated in the same way (either positive comments, negative comments, or no comments at all) but they were later put into the test situation by themselves. Interestingly, this variation caused the condition differences to be washed out. Thus, the adult comments proved effective, but only when children were later under the surveillance of this same adult. In a similar experiment (7) an adult provided more explicit verbal prohibitions against specific aggressive acts shown in a film. These prohibitions later served to inhibit the children's aggressive behavior both in the presence of the same adult who had made the comments, and in the presence of a different adult.

Another study (8) along these same lines has been carried out by Dr. Joan Grusec at the University of Toronto. She had 5-year-olds and 10-year-olds individually watch a film of an aggressive female actor while an adult made either positive comments, negative comments, or neutral comments. Later, the children were observed while they were left alone in a situation that contained a number of the same props that had been shown in the film. Still later, the children saw the film again and their spontaneous remarks were recorded. For the older children, the adult's comments seemed to have some effect -- there was less imitative aggression following the negative commentary. For the five-year-olds, however, the aggressive actions were imitated regardless of the adult's comments. Another surprising finding was that the younger children in the negative comments condition imitated the aggressive actions they had seen and, at the same time, imitated the adult's negative remarks. There was no relationship between their physical behaviour and their verbal expressions as they imitated the criticisms of the very same aggressive acts that they copied.

These experiments provide only limited encouragement for adults who would like to mediate the impact of television violence by giving simultaneous commentary and evaluation to their children. Such commentary may have value for older children or children under close supervision. But for younger children, and for children without constant supervision, parental evaluation and commentary may be largely irrelevant.

REFERENCES

1. Bandura, A. Aggression: A social learning analysis. Englewood Cliffs, N.J.: Prentice-Hall, 1973.
2. Liebert, R.M., Neale, J.M., and Davidson, E.S., The early window: Effects of television on children and youth. Elmsford, N.Y.: Pergamon Press, 1973.
3. Cline, V.B. (Ed.), Where do you draw the line? An exploration into media violence, pornography, and censorship. Provo, Utah: Brigham Young University Press. 1974.
- Drabman, R. and Thomas, M. Does TV violence breed indifference? Journal of Communication, 1975, 25, pp. 86-89.
4. Rubinstein, E.A., Comstock, G.A., and Murray, J.P. (Eds.), Television and social behavior. Vol. 4. Television in day-to-day life: Patterns of use. Washington, D.C.: Government Printing Office, 1972.
5. Gerbner, G., and Gross, L. Living with television: The violence profile. Journal of Communication, 1976, 26, 173-194.
6. Hicks, D.J. Effects of co-observer's sanctions and adult presence on imitative aggression. Child Development, 1968, 38, 303-309.
7. De Rath, G. The effects of verbal instructions on imitative aggression. Doctoral Dissertation, Michigan State University, 1963.
8. Grusec, J. The effects of co-observer evaluation on imitation: A developmental study. Developmental Psychology, 1973, 8, 141.

ISSUE 10: Does cartoon violence have different effects from realistic television violence?

Animated cartoons are a central feature of television programming directed toward children, and these cartoons are heavily saturated with violent action. A recent survey (1) of the content of children's television indicates that one-half to two-thirds of all cartoons involve violent action, making weekend children's programming the single most violent form of television available. Moreover some critics have argued that exposure to violent cartoons is an important contributor to aggressiveness in children (2). However, for the most part, the available research evidence does not seem to bear out this concern. Cartoons have not been found to produce imitative aggression.

Some early research examined the effects of violent cartoons on the behaviour of nursery school children. One investigator, Alberta Siegel (3), approached the question straightforwardly. She showed highly violent animated cartoon films to young children who watched in pairs. After the films, the children were allowed to play by themselves for about 15 minutes while they were being secretly observed through a one-way mirror. These children proved to be no more aggressive in their play than an equivalent group of children exposed to nonaggressive films. Another, more closely controlled study, has also been done with nursery school children. Half these children were individually shown a violent cartoon and half were shown a nonaggressive film. Each child was then given a "Punch and Judy" toy to play with. Pushing a lever on the toy caused one doll to hit the other doll over the head while simultaneously making an automatic record of that response. Contrary to the expectations of the experimenter, there

was very little evidence that the cartoons increased the amount that this hitting response was chosen. A similar study (4), also using a rather artificial measure of aggression, arrived at the same conclusion: no increase in aggression following violent cartoons.

Some more recent research confirms these findings. One study (5) looked at the behaviour of pairs of Grade Two children after they had seen either an aggressive cartoon, a nonaggressive cartoon, or no cartoon at all. There were no significant differences in the subsequent aggressive behaviours (pushing or fighting) of the children in these three experimental conditions. Another study (6) along these same lines had 180 public school children randomly assigned to one of three experimental groups in which they saw either a real-life aggressive film, an aggressive cartoon, or a nonaggressive film. Here again the violent cartoon failed to affect aggressive behaviour. The children who had seen the violent cartoon subsequently showed no more verbal or physical aggression than did the children who saw the nonviolent control film.

These results stand in marked contrast to experiments in which children have been shown films or television programmes of live actors behaving aggressively. This kind of material has repeatedly been shown to cause children to behave more aggressively toward human victims (8) as well as inanimate targets (9). Why the difference? Why does realistic violence produce imitative aggression while cartoon violence does not?

One possible explanation is that imitative aggression may be highly "cue-specific" (10). In films using live actors, the perceptual cues (such as the shape and colour of clothing, weapons, furniture, etc.) are very similar to the cues encountered in the test situations following the film. The fantasy figures and settings in cartoon films, on the other hand, are qualitatively very different from those encountered later. Another experiment (11)

was recently conducted specifically to examine this possibility. In this study, the level of cue similarity between the observed violence and the later situation was systematically varied. Subsequent aggression of Grade Three children was increased in the condition where the similarity was high, but not when the cue similarity was low.

Children may be excited by violent cartoons, but their later behaviour does not appear to be much affected. If we lived in a "Roadrunner" world of cliffs and giant boulders, with stylized dynamite bombs, sledgehammers, and bear traps, the situation might be different. But as it is, the gap between the fantasy world of cartoon violence and the ordinary world of everyday life is probably too great for cartoon violence to have much effect on our children's behaviour.

REFERENCES

1. Gerbner, G. and Ross, L. Living with television: The violence profile. Journal of Communication, 1976, 26, 172-194.
2. Wertham, F. Seduction of the innocent. New York: Rinehart, 1972.
3. Lovaas, O.I. Effect of exposure to symbolic aggression on aggressive behavior. Child Development, 1961, 32, 37-44.
4. Mussen, P., and Rutherford, E. Effects of aggressive cartoons on children's aggressive play. Journal of Abnormal and Social Psychology, 1961, 62, 461-464.
5. Hapkiewicz, W.G. and Roden, A.H. The effect of aggressive cartoons on children's interpersonal play. Child Development, 1971, 42, 1583-1585.
6. Hapkiewicz, W.G., and Stone, R.D. The effect of realistic versus imaginary aggressive models on children's interpersonal play. Child Study Journal, 1974, 4, 47-58.
7. Liebert, R.M., Neale, J.M., and Davidson, E.S. The early window: Effects of television on children and youth. Elmsford, N.Y.: Pergamon Press, 1973.
8. Hanratty, M.A., Liebert, R.M., Morris, L.W., and Fernandez, L.E. Imitation of film-mediated aggression against live and inanimate victims. Proceedings of the 77th annual convention of the American Psychological Association. Washington, D.C.: American Psychological Association, 1969, Pp. 457-458.
- Savitsky, J.C., Rogers, R.W., Izard, C.E., and Liebert, R.M. Role of frustration and anger in the imitation of filmed aggression against a human victim. Psychological Reports, 1971, 29, 807-810.
9. Bandura, A. Aggression: A social learning analysis. Englewood Cliffs, N.J.: Prentice-Hall, 1973.
- Bandura, A., Ross, D., and Ross, S.A. Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 1961, 63, 575-582.

- Bandura, A., Ross, D., and Ross, S.A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.
10. Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in experimental social psychology, Vol. 5. New York: Academic Press, 1970. Pp. 1-31.
11. Meyerson, L.J. The effects of filmed aggression on the aggressive responses of high and low aggressive subjects. Doctoral dissertation, University of Iowa, 1966.

ISSUE 11: Does violence shown on television distort viewers' beliefs about violence in the real world?

Television Distorts Reality

The "uncertain mirror" (1) of television gives a weirdly distorted reflection of reality. Several (2) researchers have taken count of the kinds of characters that populate the world of entertainment television. Over three-quarters of that strange world is populated by young, North American, middle class unmarried males. Children and old people account for only about ten percent of the total population. When women are shown they usually occupy family roles and, in comparison to men, they are shown as being warmer and more sociable but less rational (3).

The violence that is shown on television is also distorted. For example, in real life, violence most often stems from close personal relationships (4). But on television, violence is usually done by strangers (5). The crimes shown on television almost always involve violence while, in real life, most crimes involve money or property and no violence at all (6). About one-fifth of the characters in television drama are law officers and they act violently in about two-thirds of their appearances (7). On the other hand, in real life police rarely, if ever, even draw their guns. Homicide is the most frequent television crime, but in real life homicide accounts for only a fraction of one percent of actual crime.

But Who Believes It?

The world of television may show a grotesquely distorted version of the real world, but who really believes it?

Children do. Young children especially learn about the outside world primarily through television -- a fact that Canadian parents are

quite well aware of (8). In a survey study (9), about half of the Grade One children interviewed said that the people on television were like everyday people. Some older children also believed that television characters and real people are alike most of the time. Even children in Grades Four and Five are often uncertain about the reality of what they see on entertainment television (10). Almost half of the teenagers in a recent report indicated that crime programs "tell about life the way it really is" (11). Various studies have found that confusion between television fiction and reality is especially high among children who are more aggressive, and generally deviant (12), and children from poor families, or minority groups (13).

Clearly a large proportion of children frequently confuse television and reality. How about adults? A single example is sufficient to demonstrate that many adults are capable of the same confusion. The popular television program "Marcus Welby, M.D." features Robert Young in the role of Dr. Welby. In the first five years of that program "Dr. Welby" has received over a quarter million letters from American and Canadian viewers, most of them asking for medical advice (14).

And What Does It Matter?

Who cares if television distorts our perception of reality? Children may sometimes be amazed to find that Native People don't all live like "TV Indians." And, likewise, adults may be surprised to meet a real police detective who turns out to be a very ordinary person. But there is little harm in this.

Some more sinister results of television distortion have recently been uncovered by George Gerbner, Dean of the Annenberg School of Communication (14). He and his coworkers have shown that heavy television

users tend to develop a generally fearful and suspicious view of the world. Heavy television users are most likely to overestimate the proportion of people involved in law enforcement (reflecting television's version of reality). Similarly, heavy viewers tend to believe that most people cannot be trusted. The most striking evidence for the effects of television distortion comes from viewers who were asked to estimate their own chances of being involved in violence during any given week. Heavy television viewers were a good deal more likely to overestimate this possibility than were light viewers. Moreover, the exaggerated fear in heavy television users was held regardless of the age, sex, or education of the viewer.

Television, fear, and suspicion seem to go together. The obvious explanation for this is that the abundance of crime and violence shown on entertainment television causes people to be afraid. Of course this is not the only interpretation. It might be that especially apprehensive and mistrustful people spend more time in the relative safety of their homes, and thus watch more television than the average. This interpretation suggests that fear causes heavy television viewing. Perhaps the most plausible interpretation is that causation operates in both directions, creating a vicious circle (15). Fear causes people to stay at home and watch television. Then the crime and violence shown on television increases their fear of the outside world. Television leads to fear, and fear leads to increase use of television -- the classic self-perpetuating cycle of addiction. There is another disquieting interpretation as well.

Taking a wider view, Dr. Gerbner (14) sees the prevalence of television violence as a means of social control. The public fear and insecurity that are promoted by television violence produce an exaggerated concern for public order and an increasing dependence on the exercise of authoritarian power in our society.

REFERENCES

1. Canada, Parliament. Senate. Special Committee on Mass Media. Report. Vol. 1. The uncertain mirror. (Ottawa, Queen's Printer, 1970). (Also known as the Davey Committee Report).
2. Gerbner, G. Violence in television drama: Trends and symbolic functions. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and Social behavior, Vol. 1. Media content and control. Washington, D.C.: Government Printing Office, 1972. Pp. 28-187.
3. Tedesco, N.S. Patterns of prime time. Journal of Communication, 1974, 24, 119-124.
4. Schloss, B., and Giesbrecht, N.A. Murder in Canada. Toronto: University of Toronto, 1972.
5. Gerbner, G. Cultural indicators: The case of violence in television drama. Annals of the American Academy of Political and Social Science, 1970, 388, 69-81.
6. Silverman, R., and Teevan, J. Crime in Canadian Society. Toronto: Butterworth, 1975.
7. Liebert, R.M., Neale, J.M., and Davidson, E.S. The early window: Effects of television on children and youth. Elmsford, N.Y.: Pergamon Press, 1973.
8. Canada, Parliament. Senate. Special Committee on Mass Media. Report. Vol. 3. Good, bad, or simply inevitable? (Ottawa, Queen's Printer, 1970). (Also known as the Davey Committee Report).
9. Lyle, J., and Hoffman, H.R. Children's use of television and other media. In E.A. Rubinstein, G.A. Comstock, and J.P. Murray (Eds.), Television and social behavior. Vol. 4. Television in day-to-day life: Patterns of use. Washington, D.C.: Government Printing Office, 1972. Pp. 129-256.
10. McLeod, J.M., Atkin, C.K., and Chaffee, S.H. Adolescents, parents, and television use: Adolescent self-support measures from Maryland and Wisconsin samples. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972. Pp. 173-238.
11. McLeod, J.M., Atkin, C.K., and Chaffee, S.H. Adolescents, parents and television use: Self-report and other-report measures from Wisconsin sample. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972. Pp. 239-313.

12. McIntyre, J.J., and Teevan, J.J., Jr. Television violence and deviant behavior. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972. Pp. 383-435.
13. Greenberg, B.S., and Gordon, T.F. Children's perceptions of television violence: A replication. In G.A. Comstock, E.A. Rubinstein, and J.P. Murray (Eds.), Television and social behavior. Vol. 5. Television's effects: Further explorations. Washington, D.C.: Government Printing Office, 1972. Pp. 211-230.

Greenberg, B.S., and Dervin, B. Use of the mass media by the urban poor. New York: Praeger, 1970.
14. Gerbner, G. and Gross, L. Living with television: The violence profile. Journal of Communication, 1976, 26, 173-194.
15. Hadley, R. The scary world of the TV Addict. Psychology Today, 1976, 10, No. 3, p.6.

ISSUE 12: Does television violence really have the effect of increasing violence in society?

The Evidence

There is evidence from a variety of sources that television violence is a cause of aggressive and criminal behaviour. How conclusive is this evidence? A brief review shows that the evidence comes from four major sources; anecdotal evidence, controlled laboratory studies, naturalistic field studies, and correlational research.

Anecdotal Evidence. There are numerous well documented instances of crime and violence occurring in everyday life that can be directly traced to the entertainment media (1). Two examples will suffice. In Los Angeles, a seven-year-old boy was caught in the act of putting ground glass into the lamb stew that was to be the family dinner. The boy explained that he was testing out a technique that he had seen on television (2). In another case, passengers on a Boeing 707 flight were shown an exciting and violent war film "A Twist of Sand." During the film, one of the passengers became very agitated. When the pilot was called back to investigate, the passenger attacked him. Fortunately, the plane was able to make an unscheduled landing while the captain and five other passengers subdued the attacker. Following his arrest, he explained that he had started fighting because he had watched everybody fighting in the war movie (3).

These incidents illustrate two of the major concerns of the critics of television violence; that children may learn new techniques of aggression by seeing them on television, and that media violence may trigger off acts of aggression in adolescents and adults. There are, of course, many

additional anecdotal examples along these same lines.

Controlled Laboratory Studies. Anecdotal examples alone cannot prove that media violence is an important contributor to violence in society. It may be that only very unusual individuals are involved in these incidents, or the incidents may occur only under extreme circumstances. Recently, however, research psychologists have made controlled laboratory studies of the effects of media violence on ordinary children and adults under more normal circumstances. The implications of the anecdotal examples appear to be strongly supported by their results.

Dr. Albert Bandura and his co-workers (4) have demonstrated how quickly and completely children can learn new forms of aggression through observation. In a typical demonstration, children are shown on film or television an inflated figure being kicked, punched, hammered, and variously attacked by an adult actor. Afterwards the children are taken individually to a room containing the hammer, the inflated figure, and a one-way observation window through which their behaviour can be observed. There the children typically perform many of the novel aggressive actions that they previously witnessed. Other children, not previously exposed to the aggressive actor, show few of these aggressive behaviours. If nothing else, this kind of experiment shows that children can and do learn novel forms of aggression simply by seeing them on film or television. A variety of additional studies (5) have indicated those circumstances under which the aggressive acts are most likely to be carried out against both inanimate and human targets (6).

Quite different laboratory procedures have been used to investigate the possibility that media violence may increase aggressiveness in adolescents and adults. In the original studies (7) conducted by Richard Walters and his co-workers at the University of Waterloo, a situation was

arranged where subjects' aggressiveness could be measured objectively following their exposure to an aggressive film. In order to keep the subjects from guessing the actual purpose of the study, the procedure was disguised as a "study of learning based on punishment." Some subjects were shown a film of teenagers engaged in a vicious knife fight. Others saw a film on art. All subjects then gave electric shock to a "learner" as punishment for errors on a learning task. Subjects exposed to the violent film were typically the ones who gave more shocks and stronger shocks. This general procedure, with many variations, has been repeated dozens of times by researchers in the United States and Europe. With great regularity the results have been the same; exposure to film or television violence results in an increase in later aggressiveness (8).

Naturalistic Field Experiments. Questions may legitimately be raised about the generalizability of these laboratory findings to real-life situations. Some people (9) have questioned the measures of aggression that have been used, and others feel that the artificial setting of the laboratory situation limits any generalization to the real world (10). These sort of objections have led a number of researchers to conduct "field experiments" in which media violence effects have been studied in everyday settings. Three such experiments have produced inconclusive results (11). However, some fairly convincing evidence comes from three other naturalistic field experiments (12), two of them conducted in the United States and one in Europe. In these studies, groups of adolescent delinquents were shown commercial films for five successive nights as part of their normal activities. For some of the groups, the selected films were highly violent. For the other groups the films were uniformly nonviolent. The results showed that the boys who saw the violent films later engaged in sharply higher actual aggression than did the boys who saw the non-violent films. Here again the results support the conclusion that media violence serves

to heighten the aggressiveness of the viewers.

Correlational Research. Anecdotal evidence, laboratory findings, and the results of naturalistic field experiments all converge on the same conclusion; media violence increases aggressive behaviour. The same conclusion is supported by several correlational studies as well. Correlational research asks the general question "What goes together with what?"; and in the present case "Does watching television violence in everyday life go together with aggressive behaviour in everyday life?" The results of several such correlational studies have shown a significant association between watching violence on television and aggressive behaviour.

In a study (13) of several thousand adolescents, the objectively rated violence level of their favourite television program was found to be associated with the level of the teenagers' criminal and aggressive behaviour. Another study (14) compared the level exposure to television violence in 1000 nine-, ten-, and eleven-year olds with their stated willingness to use violence themselves. The investigators concluded that, "The greater the level of exposure to television violence, the more the child was willing to use violence, to suggest it as a solution to conflict, and to perceive it as effective." A number of additional studies along these same lines have reached similar conclusions (5).

The most elaborate study (15) to date was conducted over a ten year time span. The researchers found that preference for television violence was associated with aggressiveness in Grade Three boys. More interestingly, the television violence seen in Grade Three was positively associated with the boys' aggressiveness level when it was measured ten years later. An additional result was that there was no association between Grade Three

aggressiveness and later television preferences. This later finding indicates that it is television violence that leads to aggressiveness, and not that aggressiveness leads to a preference for television violence (16).

Summary. The research evidence on the impact of television violence is diverse and it is complex. It is not surprising that the results are also complex. Nor is it surprising that no single conclusion or interpretation of the results is supported by all of the findings. Similarly, the soundness of the particular pieces of research in each of these categories can always be questioned--there is probably not a single research study that is not open to criticism in some respect. Despite this complexity, an overall pattern of results can be identified. First, only a few researchers have suggested that any possible benefits to society might follow from the violence shown on entertainment television. Second, a larger number of studies have reported only small or non-significant effects. And third, a still larger number of studies, clearly the majority, have found negative effects resulting from the kind of violence shown on entertainment television.

What Does the Evidence Mean?

Is media violence really an important contributor to aggression in society? A good deal of research evidence indicates that it is. But some critics remain skeptical; they remain unconvinced that media violence is really a serious social problem (17). Some of the differences between the researchers and their critics are more apparent than real (18). For example, almost everyone accepts the conclusion that under some circumstances, watching violence increases the likelihood of some forms of aggression. On the other hand, almost everyone can agree that media violence is just

one of a large number of factors determining the level of aggressiveness and criminal violence in society.

Ultimately, it is a quantitative question: "How much aggression and violence in society can be attributed to violence shown in the media?" The controlled experimental studies seem to indicate short-term effects of twenty percent or more. The correlational research indicates long term effects of ten percent or less. These quantitative estimates cannot be verified in detail. They are proposed here in order to place the issues in a reasonable perspective. Concerned citizens must recognize that the elimination of brutality and violence from television and other media will not eliminate the major proportion of violent crimes either in the short run or in the long run. On the other hand, the people responsible for producing the high level of violence that is routinely shown in the media, and those people who are unwilling to regulate it, must recognize the likelihood that real people are being hurt everyday because of it.

REFERENCES

1. Schramm, W., Lyle, J., and Parker, E.B. Television in the lives of our children. Stanford, Ca.: Stanford University Press, 1961.

United States Congress. Senate Committee on the Judiciary. Hearings from the Subcommittee to Investigate Juvenile Delinquency. Juvenile Delinquency. Part 10. Effects on young people of violence and crime portrayed on television. 87th Congress, 1st and 2nd sessions. June 8, 1961-May 14, 1962. Washington, D.C.: Government Printing Office, 1963.
2. Schramm, W., Lyle, J., and Parker, E.B. Television in the lives of our children. Stanford, Ca.: Stanford University Press, 1961.
3. Toronto Globe and Mail, March 14, 1969.
4. Bandura, A. Aggression: A social learning analysis. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Bandura, A., Ross, D., and Ross, S.A. Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 1961, 63, 575-582.

Bandura, A., Ross, D., and Ross, S.A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.
5. Liebert, R.M., Neale, J.M. and Davidson, E.S. The early window: Effects of television on children and youth. Elmsford, N.Y.: Pergamon Press, 1973.
6. Hanratty, M.A., Liebert, R.M., Morris, L.W., and Fernandez, L.E. Imitation of film-mediated aggression against live and inanimate victims. Proceedings of the 77th annual convention of the American Psychological Association. Washington, D.C.: American Psychological Association, 1969, pp. 457-458.

Savitsky, J.C., Rogers, R.W., Izard, C.E., and Liebert, R.M. Role of frustration and anger in the imitation of filmed aggression against a human victim. Psychological Reports, 1971, 29, 807-810.
7. Walters, R.H., and Thomas, E.L. Enhancement of punitiveness by visual and audiovisual displays. Canadian Journal of Psychology, 1963, 17, 244-255.

Walters, R.H., Thomas, E.L., and Acker, C.W. Enhancement of punitive behavior by audio-visual displays. Science, 1962, 136, 872-873.
8. Comstock, G.A., and Rubinstein, E.A. (Eds.), Television and social

behavior. Vol. 3. Television and adolescent aggressive-
ness. Washington, D.C.; Government Printing Office, 1972.

Goranson, R.E. Media violence and aggressive behavior: A review of experimental research. In L. Berkowitz (Ed.), Advances in experimental social psychology. Vol. 5. New York: Academic Press, 1970. Pp. 1-31.

9. Cater, D., and Strickland, D. TV violence and the child. New York: Russell Sage, 1975.

Kane, T., Joseph, J., Tedeschi, J. Person perception and the Berkowitz paradigm for the study of aggression. Journal of Personality and Social Psychology, 1976, 33, 663-673.

10. Howitt, D., and Cumberbatch, G. Mass media and society. New York: Wiley, 1975.

11. Feshback, S., and Singer, R.D. Television and aggression: An experimental field study. San Francisco: Jossey-Bass, 1971.

Stein, A.H., and Friedrich, L.K. Television content and young children's behavior. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock, (Eds.), Television and social behavior. Vol. 2. Television and social learning. Washington, D.C.: Government Printing Office, 1972. Pp. 202-317.

Steur, F.B., Applefield, J.M., and Smith, R. Televised aggression and the interpersonal aggression of preschool children. Journal of Experimental Child Psychology, 1971, 11, 442-447.

12. Parke, R.D., Berkowitz, L., Leyens, J.P., West, S., and Sebastian, R.J. Film violence and aggression: A field experimental analysis. Journal of Social Issues, in press.

Leyens, J.P., Parke, R.D., Camino, L., and Berkowitz, L. The effects of movie violence on aggression in a field setting as a function of group dominance and cohesion. Journal of Personality and Social Psychology, 1975, 32, 346-360.

Parke, R.D., Berkowitz, L., Leyens, J.P., West, S., and Sebastian, R. The effects of repeated exposure to movie violence on aggressive behavior in juvenile delinquent boys: Field experimental studies. In L. Berkowitz (Ed.), Advances in experimental social psychology. New York: Academic Press, in press.

Parke, R.D. Field experimental approaches to children's aggression: Some methodological problems and some future trends. In W.W. Hartup and J. de Wit (Eds.), Determinants and origins of aggressive behavior. The Hague: Mouton, in press.

13. McIntyre, J.J., and Teevan, J. Television violence and deviant behavior. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972. Pp. 383-435.

14. Dominick, J.R., and Greenberg, B.S. Attitudes toward violence: The interaction of television, exposure, family attitudes, and social class. In G.A. Comstock and E.A. Rubinstein (Eds.), Television and social behavior. Vol. 3. Television and adolescent aggressiveness. Washington, D.C.: Government Printing Office, 1972. Pp. 314-335.

15. Eron, L.D., Huesmann, L.R., Lefkowitz, M.M. and Walder, L.O. Does television violence cause aggression? American Psychologist, 1972, 27, 253-263.

16. Chaffee, S.H., and McLeod, J.M. Adolescents, parents, and television violence. Paper presented at the meeting of the American Psychological Association, Washington, D.C., Sept. 1971.

17. Howitt, D., and Cumberbatch, G. Mass media and society. New York: Wiley, 1975.

- Singer, J.L. The influence of violence portrayed in television or motion pictures upon overt aggressive behavior. In J.L. Singer (Ed.), The control of aggression and violence: Cognitive and physiological factors. New York: Academic Press, 1971. Pp. 19-60.

18. Comstock, G.A. The evidence so far. Journal of Communication, 1975, 25, 25-34.

